

U.S. Patent Application No. 10/621,096
Amendment dated June 21, 2005
Reply to Office Action of March 21, 2005

Amendments to the Specification:

Please replace the paragraph that begins at page 10, line 14, and ends of page 11, line 4, with the following amended paragraph:

The monolithic sputtering target assembly can be formed in many ways. For instance, the monolithic sputtering target assembly can be formed by taking a plate or billet of sufficient thickness. Typically, the thickness of the plate or billet has a thickness that is the same or greater than the greatest thickness of the overall target assembly. This plate or billet of any purity, can then be properly worked or deformed to create the desired texture and/or grain size as shown, for instance, in WO 00/31310. Then, the flanged portions and overall diameters of the target assembly can be cut from this plate or billet using standard techniques such as, but not limited to, conventional machining, grinding, Electro-Discharge Machining (EDM), abrasive-jet / water-jet cutting, and the like. The flange portions can optionally be worked or deformed to alter the properties of the flange, such as cold worked which leads to an improved yield strength and more rigidity. For example, a planar, circular sputtering target blank can be rotated about its center and have its circumferential region reduced in thickness by passing between rollers or hammers. Furthermore, the flange portion can be not recrystallized at this point. The difference in yield strength between the flange portion and the target blank portion can be 10% to 100% or more.